

Storm Analysis

As of 08/27/2015 12:00 AST, water levels in Puerto Rico, the U.S. Virgin Islands and Barbuda are 0.5-0.7 feet elevated above predictions. Winds are 5 to 15 knots with gusts up to 20 knots. Winds are slowly increasing across the region. Wind speeds in Barbuda have been dramatically increased up to 37 knots with gusts up to 45 knots during last hours. Barometric pressure began to decrease across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst:KG

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM ERIKA ADVISORY NUMBER 11

1100 AM AST THU AUG 27 2015

...ERIKA REMAINS POORLY ORGANIZED...

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The government of the Dominican Republic has extended the Tropical Storm Watch westward along the north coast of the Dominican Republic to the border of Haiti.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for...

- * Anguilla
- * Saba and St. Eustatius
- * St. Maarten
- * St. Martin
- * St. Barthelemy
- * Montserrat
- * Antigua and Barbuda
- * St. Kitts and Nevis
- * Puerto Rico
- * Vieques
- * Culebra
- * U.S. Virgin Islands
- * British Virgin Islands

A Tropical Storm Watch is in effect for...

- * Guadeloupe
- * North coast of the Dominican Republic from Cabo Engano to the border of Haiti
- * Southeastern Bahamas
- * Turks and Caicos Islands

A Tropical Storm Watch means that tropical storm conditions are possible within the watch area, generally within 48

hours.

Interests elsewhere in the Dominican Republic should monitor the progress of Erika.

For storm information specific to your area in the United States, including possible inland watches forecast office. For storm information specific to the United States, please monitor products issued by your national meteorological service.

DISCUSSION AND 48-HOUR OUTLOOK

At 1100 AM AST, the center of Tropical Storm Erika was located near latitude 16.4 North, longitude 63.3 West. Erika is moving toward the west near 16 mph. A turn toward the

west- northwest is forecast later today, and this general motion should continue for the next 48 hours. On the forecast track, the center of Erika will move near the Virgin Islands later today,

move near or north of Puerto Rico tonight, and pass north of the north coast of the Dominican Republic on Friday.

Maximum sustained winds are near 50 mph with higher gusts. Little change in strength is forecast during the next 48 hours.

Tropical storm force winds extend outward up to 105 miles from the center.

The estimated minimum central pressure is 1006 mb.

HAZARDS AFFECTING LAND

WIND: Tropical storm conditions are expected to continue over portions of the warning area in the Leeward Islands through early this afternoon, and reach the Virgin Islands later today and Puerto

Rico tonight. Tropical storm conditions are possible in the watch area in the Leeward Islands through early this afternoon. Tropical storm conditions could reach portions of the watch area in the Dominican Republic on Friday and the southeastern Bahamas, and Turks and the Caicos Islands late Friday and Friday night.

RAINFALL: Erika is expected to produce total rainfall accumulations of 4 to 8 inches with maximum amounts of 12 inches possible across

portions of the Leeward Islands, the Virgin Islands, Puerto Rico, the Dominican Republic, the Turks and Caicos Islands, and the southeast Bahamas through Saturday. Dominica reported nearly 9 inches of rainfall overnight, with significant flooding occurring on the island.

Forecaster Pasch

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: <u>Barbuda - Water Level</u>, <u>Barbuda - Winds</u>, <u>Barbuda - Barometric</u>, <u>Christiansted Harbor</u>, <u>St Croix - Water Level</u>, <u>Christiansted Harbor</u>, <u>St Croix - Winds</u>, <u>Christiansted Harbor</u>, <u>St Croix - Barometric</u>, <u>Lime Tree Bay - Water Level</u>, <u>Lime Tree Bay - Winds</u>, <u>Lime Tree Bay - Barometric</u>, <u>Charlotte Amalie - Water Level</u>, <u>Charlotte Amalie - Winds</u>, <u>Isabel Segunda</u>, <u>Vieques Island - Winds</u>, <u>Esperanza</u>, <u>Vieques Island - Water Level</u>, <u>Esperanza</u>, <u>Vieques Island - Barometric</u>, <u>Fajardo - Water Level</u>, <u>Fajardo - Water Lev</u>

<u>Level, Fajardo - Winds, Yabucoa Harbor - Water Level, Yabucoa Harbor - Winds, San Juan - Water Level, San Juan - Winds, San Juan - Barometric</u>

NOAA/NOS/CO-OPS 9761115 Barbuda Preliminary Water Level, relative to Mean Higher High Water(MHHW) 1.0 Height in Feet (MHHW) 0.8 0.6 0.4 0.2 0.0 -0.2 -0.4 -0.6 -0.8 08/26 08/27 08/25 08/26 08/27 08/28 12:00 00:00 12:00 00:00 00:00 12:00

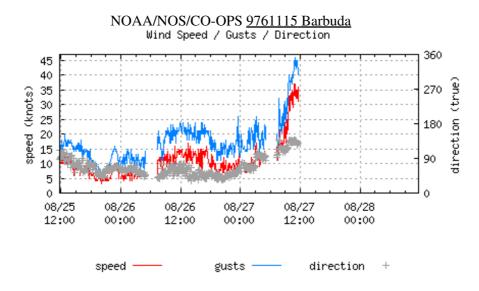
Last Observed Sample: 08/27/2015 11:42 (AST). Data relative to MHHW Observed: -0.15 ft. Predicted: -0.59 ft. Residual: 0.44 ft. Historical Maximum Water Level: Aug 23 2012, 1.05 ft. Next High Tide: 08/27/2015 17:36 (AST), 0.09 ft.

(Obs-Pred)

MHHW

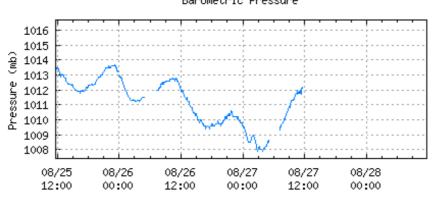
Predicted Tide

Observed WL



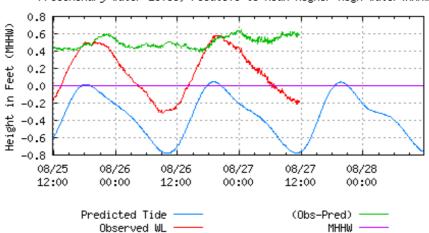
Last Observed Sample: 08/27/2015 11:42 (AST) Wind Speed: 35 knots Gusts: 44 knots Direction: 132° T

NOAA/NOS/CO-OPS <u>9761115 Barbuda</u> Barometric Pressure



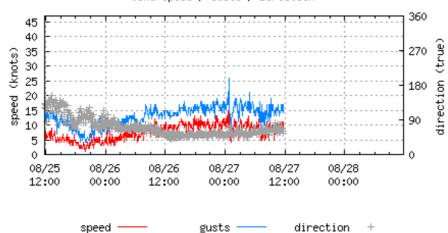
barometric pressure ——
Last Observed Sample: 08/27/2015 11:42 (AST)
Barometric Pressure: 1012.1 mb

NOAA/NOS/CO-OPS <u>9751364 Christiansted Harbor, St Croix, VI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



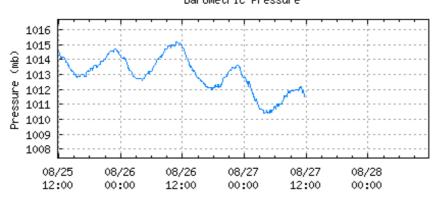
Last Observed Sample: 08/27/2015 11:42 (AST). Data relative to MHHW Observed: -0.18 ft. Predicted: -0.77 ft. Residual: 0.59 ft. Historical Maximum Water Level: Oct 16 2008, 1.17 ft. Next High Tide: 08/27/2015 19:42 (AST), 0.04 ft.

NOAA/NOS/CO-OPS <u>9751364 Christiansted Harbor, St Croix, VI</u> Wind Speed / Gusts / Direction



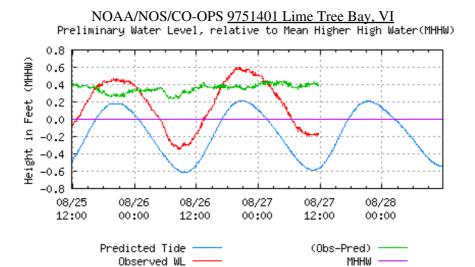
Last Observed Sample: 08/27/2015 11:42 (AST) Wind Speed: 9 knots Gusts: 14 knots Direction: 56° T

NOAA/NOS/CO-OPS <u>9751364 Christiansted Harbor, St Croix, VI</u> Barometric Pressure

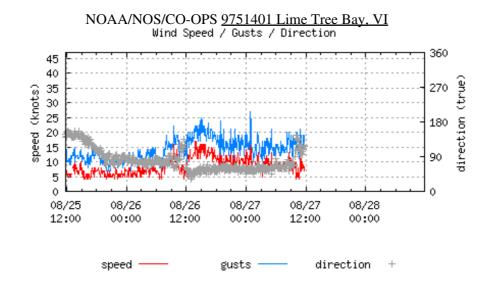


barometric pressure ----

Last Observed Sample: 08/27/2015 11:42 (AST)
Barometric Pressure: 1011.5 mb

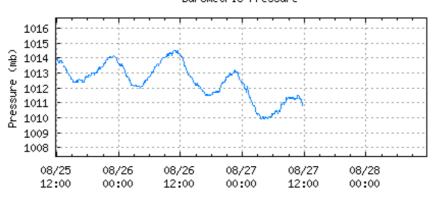


Last Observed Sample: 08/27/2015 11:42 (AST). Data relative to MHHW Observed: -0.17 ft. Predicted: -0.57 ft. Residual: 0.40 ft. Historical Maximum Water Level: Nov 17 1999, 1.88 ft. Next High Tide: 08/27/2015 21:19 (AST), 0.21 ft.



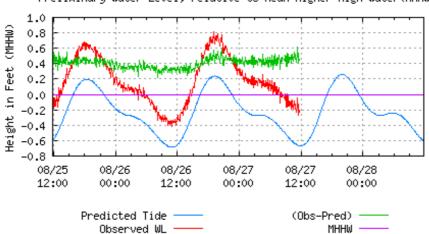
Last Observed Sample: 08/27/2015 11:42 (AST) Wind Speed: 7 knots Gusts: 14 knots Direction: 116° T

NOAA/NOS/CO-OPS <u>9751401 Lime Tree Bay, VI</u> Barometric Pressure



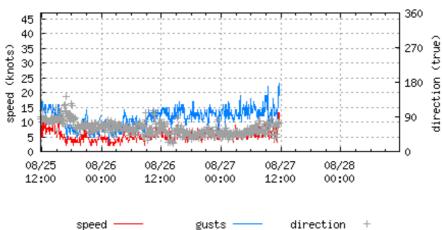
barometric pressure ——
Last Observed Sample: 08/27/2015 11:42 (AST)
Barometric Pressure: 1010.8 mb

NOAA/NOS/CO-OPS <u>9751639 Charlotte Amalie, VI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



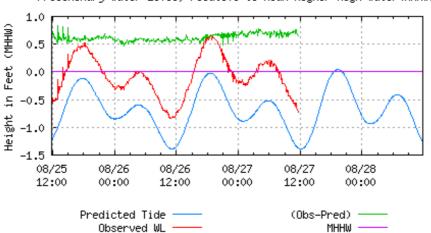
Last Observed Sample: 08/27/2015 11:42 (AST). Data relative to MHHW Observed: -0.22 ft. Predicted: -0.67 ft. Residual: 0.45 ft. Historical Maximum Water Level: Sep 16 1995, 2.93 ft. Next High Tide: 08/27/2015 19:56 (AST), 0.26 ft.

NOAA/NOS/CO-OPS <u>9751639 Charlotte Amalie, VI</u> Wind Speed / Gusts / Direction



Last Observed Sample: 08/27/2015 11:42 (AST) Wind Speed: 13 knots Gusts: 19 knots Direction: 75° T

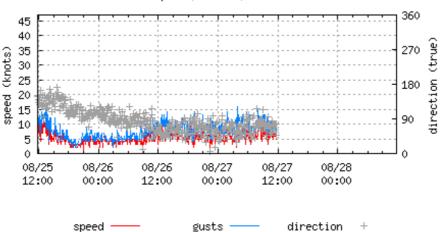
NOAA/NOS/CO-OPS <u>9752619 Isabel Segunda</u>, <u>Vieques Island</u>, <u>PR</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/27/2015 11:42 (AST). Data relative to MHHW Observed: -0.73 ft. Predicted: -1.38 ft. Residual: 0.65 ft.

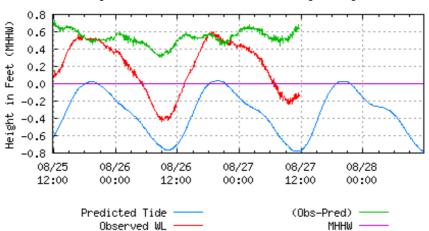
Historical Maximum Water Level: n/a Next High Tide: 08/27/2015 19:20 (AST), 0.05 ft.

NOAA/NOS/CO-OPS <u>9752619 Isabel Segunda, Vieques Island, PR</u> Wind Speed / Gusts / Direction



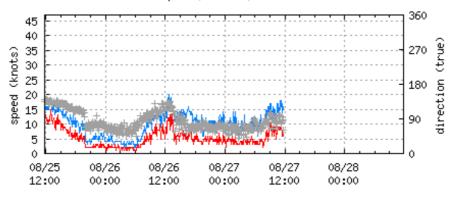
Last Observed Sample: 08/27/2015 11:42 (AST) Wind Speed: 5 knots Gusts: 6 knots Direction: 77° T

NOAA/NOS/CO-OPS <u>9752695 Esperanza</u>, <u>Vieques Island</u>, <u>PR</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



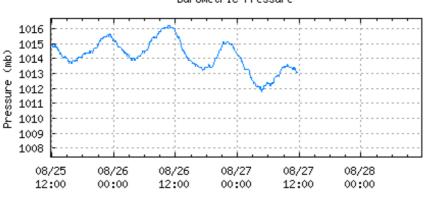
Last Observed Sample: 08/27/2015 11:42 (AST). Data relative to MHHW Observed: -0.13 ft. Predicted: -0.77 ft. Residual: 0.64 ft. Historical Maximum Water Level: Aug 22 2011, 0.99 ft. Next High Tide: 08/27/2015 20:08 (AST), 0.03 ft.

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR Wind Speed / Gusts / Direction



speed — gusts — direction + Last Observed Sample: 08/27/2015 11:42 (AST) Wind Speed: 7 knots Gusts: 15 knots Direction: 62° T

NOAA/NOS/CO-OPS <u>9752695 Esperanza, Vieques Island, PR</u> Barometric Pressure



barometric pressure ----

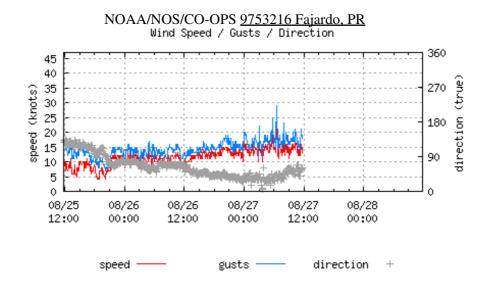
Last Observed Sample: 08/27/2015 11:42 (AST)
Barometric Pressure: 1013.1 mb

NOAA/NOS/CO-OPS 9753216 Fajardo, PR Preliminary Water Level, relative to Mean Higher High Water(MHHW) Height in Feet (MHHW) 0.5 0.0 -0.5-1.0 08/27 08/25 08/26 08/27 08/28 08/26 00:00 00:00 12:00 12:00 12:00 00:00 Predicted Tide (Obs-Pred)

Last Observed Sample: 08/27/2015 11:42 (AST). Data relative to MHHW Observed: -0.92 ft. Predicted: -1.48 ft. Residual: 0.56 ft. Historical Maximum Water Level: Aug 30 2010, 0.84 ft. Next High Tide: 08/27/2015 18:56 (AST), 0.20 ft.

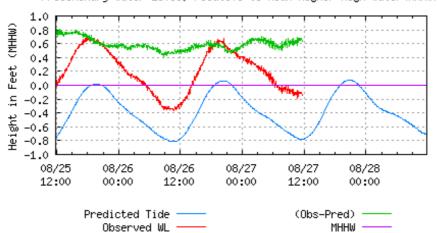
MHHW

Observed WL



Last Observed Sample: 08/27/2015 11:42 (AST) Wind Speed: 15 knots Gusts: 19 knots Direction: 58° T

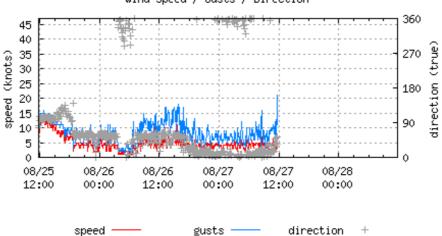
NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/27/2015 11:42 (AST). Data relative to MHHW Observed: -0.14 ft. Predicted: -0.78 ft. Residual: 0.64 ft.

Historical Maximum Water Level: n/a Next High Tide: 08/27/2015 20:51 (AST), 0.08 ft.

NOAA/NOS/CO-OPS <u>9754228 Yabucoa Harbor, PR</u> Wind Speed / Gusts / Direction



Last Observed Sample: 08/27/2015 11:42 (AST) Wind Speed: 3 knots Gusts: 11 knots Direction: 54° T

NOAA/NOS/CO-OPS 9755371 San Juan, PR Preliminary Water Level, relative to Mean Higher High Water(MHHW) Height in Feet (MHHW) 0.5 0.0 -0.5 -1.0 -1.5 -2.0 08/25 08/26 08/26 08/27 08/27 08/28 12:00 00:00 12:00 00:00 12:00 00:00

Last Observed Sample: 08/27/2015 11:36 (AST). Data relative to MHHW Observed: -1.07 ft. Predicted: -1.50 ft. Residual: 0.43 ft. Historical Maximum Water Level: Sep 18 1989, 2.77 ft.

Next High Tide: 08/27/2015 19:20 (AST), 0.32 ft.

(Obs-Pred)

MHHW

direction

Predicted Tide

speed

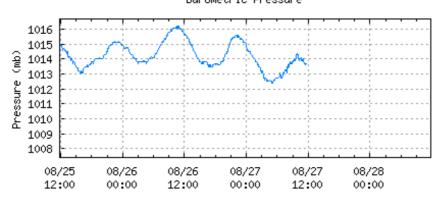
Observed WL

NOAA/NOS/CO-OPS 9755371 San Juan, PR Wind Speed / Gusts / Direction 360 45 40 direction (true) 270 35 speed (knots) 30 25 180 20 15 90 10 5 0 08/25 08/26 08/26 08/27 08/27 08/28 12:00 00:00 12:00 00:00 12:00 00:00

Last Observed Sample: 08/27/2015 11:36 (AST) Wind Speed: 14 knots Gusts: 19 knots Direction: 63° T

gusts

NOAA/NOS/CO-OPS <u>9755371 San Juan, PR</u> Barometric Pressure



barometric pressure ----

Last Observed Sample: 08/27/2015 11:36 (AST)

Barometric Pressure: 1013.7 mb

Latest Water Level Observations on MHHW

Station II	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
9761115	Barbuda	08/27/2015 11:42 (AST)	-0.15 ft	-0.59 ft	0.44 ft	0.75 ft
9751364	Christiansted Harbor, St Croix, VI	08/27/2015 11:42 (AST)	-0.18 ft	-0.77 ft	0.59 ft	0.58 ft
9751401	Lime Tree Bay, VI	08/27/2015 11:42 (AST)	-0.17 ft	-0.57 ft	0.40 ft	0.60 ft
9751639	Charlotte Amalie, VI	08/27/2015 11:42 (AST)	-0.22 ft	-0.67 ft	0.45 ft	0.81 ft
9752619	Isabel Segunda, Vieques Island, PR	08/27/2015 11:42 (AST)	-0.73 ft	-1.38 ft	0.65 ft	0.64 ft
9752695	Esperanza, Vieques Island, PR	08/27/2015 11:42 (AST)	-0.13 ft	-0.77 ft	0.64 ft	0.60 ft
9753216	Fajardo, PR	08/27/2015 11:42 (AST)	-0.92 ft	-1.48 ft	0.56 ft	0.61 ft
9754228	Yabucoa Harbor, PR	08/27/2015 11:42 (AST)	-0.14 ft	-0.78 ft	0.64 ft	0.67 ft
9755371	San Juan, PR	08/27/2015 11:36 (AST)	-1.07 ft	-1.50 ft	0.43 ft	0.73 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce